Titanium Satellite

ASC1

Satellite Positioner and Polarity Controller

Owners Manual v.1

Titanium Satellite

Congratulations! You now own the most advanced satellite dish controller based on the latest technologies, the ASC1 dish actuator and polarity controller by Titanium Satellite. The ASC1 has been assembled using the highest quality components to provide exceptional performance and years of reliable operation.

The ASC1 maybe used as a stand-alone or as a fully automatic positioner when connected to your DiSEqC capable satellite receiver. Replaces old legacy analog or 4DTV satellite receivers to completely control a motorized satellite dish. No more conversion charts taped to the wall or juggling multiple remotes to position the dish and select the correct polarity!

Any DiSEqC capable satellite receiver connected to the ASC1 using a single coax cable, automatically controls satellite dish positioning, polarity and skew offset. Simply change channels on your STB and the ASC1 will take care of the rest. Unattended blind scanning of the entire arc with both polarities on a mechanical polarity servo type system is once again possible.

PC loader/editor software and a RS-232 serial port allows back-up and restoration of satellite positions, custom satellite names and even share your custom satellite list. No more hours of reprogramming after factory reset. No need to send the ASC1 in for reprogramming or put up with outdated satellite names. Visit the support section of www.TitaniumSatellite.com for software, satellite lists and firmware upgrades that will add even more exciting functions and features to your ASC1.

The heavy duty 36Vdc @ 5 amp power supply exceeds every other consumer controller available. Effortlessly lifts large, heavy dishes and overcomes wind loads and large snowfalls. A proprietary function ramps in and out of motor movements to reduce the wear and tear on the motor and support hardware.

IEC power connector and switchable AC input 115/230Vac @ 50/60hz allows the ASC1 to be operated anywhere in the world. Separate power source for polarity servo control and another for LNB, LNBFs and switches. Switchable LNB power settings of 13/18Vdc, reversed 18/13Vdc, fixed 18Vdc or 13Vdc @ 450mA provides many power options for your system.

Visit www.TitaniumSatellite.com for expanded owners manuals, operational videos and a FAQ section. These support materials are being continuously updated as new features are introduced.

Please contact us with any questions or suggestions for product improvement. Thank you for your purchase!

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Important Notice: Save all original boxes, manuals, accessories and packaging materials in case it is necessary to return the merchandise. Before unpacking or assembly of any item, inventory the accessories and check for damage. Review the warranty, exchange and refund policies provided by your reseller. Immediately contact your reseller to report any issues.

Package Contents:

- ASC1 Controller
- Remote Control Unit
- 2 AAA Batteries
- RS-232 F/F DB-9 Cable
- UL approved 3 pin AC cord.

Materials contained in this installation manual are the property of:
Titanium Satellite
PO Box 1201
Meadow Vista, CA 95722
530-652-4405
http://www.TitaniumSatellite.com

Important Safety Instructions

❶ Read these instructions.

❷ Keep these instructions.

❸ Heed all warnings.

❹ Follow all instructions.

❺ Do not use this apparatus near water.

❻ Clean only with dry cloth.

❼ Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

❽ Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus(including amplifiers)that produce heat.

❾ Do not defeat the safety purpose of the polarized or grounding-type plug.
A polarized plug has two blades with one wider than the other.
A grounding type plug has two blades and a third grounding prong.
The wide blade or third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

❿ Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

⓫ Only use attachments/accessories specified by the manufacturer.

⓬ Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

⓭ Unplug this apparatus during lightning storms or when unused for long periods of time.

⓮ Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Caution - These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualifie to do so.

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS

Precautions

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER(OR BACK). NO USER-SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

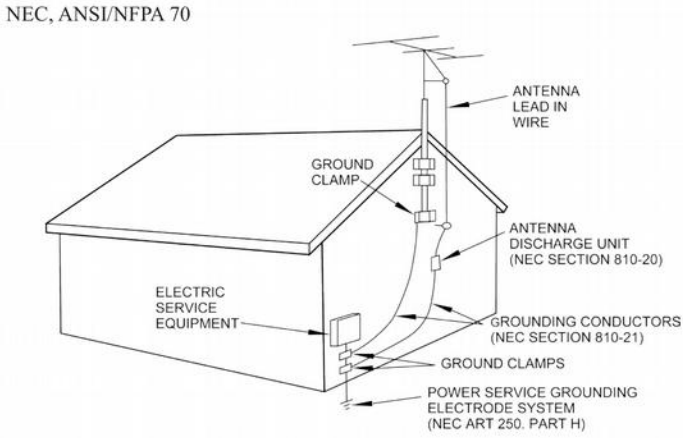
This symbol indicates important instructions accompanying the product.

Do not install this equipment in a confined space such as a bookcase or similar unit.

WARNING : To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

Notice ① The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

② The mains plug is used as the disconnect device. The disconnect device shall remain readily operable.


NEC, ANSI/NFPA 70
ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250. PART H)

Example of Antenna Grounding

Replacement Parts When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards. Modification to the hardware or software without authorization by the manufacturer the will result in voiding any warranty. Service assistance may be arranged by contacting your reseller.

Safety Check Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

ASC1 Specifications

AC Voltage In	115/230Vac, 50/60hz - User Setting
Current in Operation	600 ~ 1200mA @ 115Vac 340 ~ 640mA @ 230Vac
Current in Standby	270mA @ 115Vac / 120mA @ 220Vac
Input Protection	2A @ 250Vac User Replaceable Fuse
Output Voltage M1 / M2	38Vdc (max)
Output Current M1 / M2	5A (max)
Dual Motor Relays	10Amp @ 40Vdc (max)
IF In / Out Connectors	F-type IEC169-24 Female Loop-Through
Output Voltage F-Fitting	13Vdc/18Vdc Automatic or Fixed
Output Current F-Fitting	450mA (max)
Over Current F-Fitting	Thermal Protection w/Auto Reset
Motor Connections	M+ / M- Screw Terminal 14 gauge
Sensor	S+ / S- Screw Terminal 14 gauge
Servo	Gnd/Pulse/+5Vdc 550m Screw Terminal 14 gauge
RF Insertion Loss	2.5dB
DiSEqC Control Amplitude	0.8 ±0.2V (required input level)
DiSEqC 1.2 Positions	99
Positioner Count	10,000 (+5000 to -5000)
Sensor Resolution	50hz
Skew Offset	+/- 90° from Polarity Setting
RS-232	Transfer Rate 56Kbps, 9 pin Male D-Sub
LCD Operation/Programming	4 Line Scrolling, Green Color Backlight
Front Panel Keys	7 Keys: Power, OK, Lock (Keyboard/Remote) (Dual Menu Nav) - East, West, Skew+, Skew-
Remote Control Keys	19 Active Keys: Power, OK, East, West, Skew+, Skew-, +, -, Previous, Home, Numeric (0-9)
Dimensions	11 L x 9.5 D x 4.5 H in 280 L x 240 D x 115 H mm
Weight	11.7 lbs / 5.3 KG

DiSEqC is a trademark of EUTELSAT
Assembled in China

Warranty

This product is warrantied against manufacturing and design defect for one year from the date of purchase. All warranty claims must be processed through your reseller and include a copy of the purchase receipt. This warranty is available only to the Customer whose name appears on the sales invoice. If a Vendor warranty is stated on the invoice, Vendor will repair or replace, at Vendor's option, the product containing manufacturing defects as long as the product is returned in its original shipping materials to Vendor within the original Vendor warranty period. Firmware upgrades with unapproved files or hardware modifications by a non-Vendor approved technician voids any and all warranties, expressed or implied. No merchandise will be accepted for repair or replacement without prior RMA number.

ASC1 Front Panel Keys:

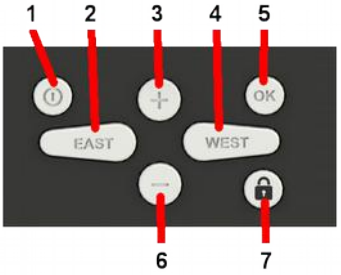
1. Standby/Operate Mode
2. Drive Motor - East

   Menu Function - Left
3. Polarity - Skew Offset Increase

   Menu Function - Up
4. Drive Motor - West

   Menu Function - Right
5. Menu Function – Enter or Accept
6. Polarity - Skew Offset Decrease

   Menu Function - Down
7. Lock - Keypad and Remote



Remote Control Keys:

Standby/Operate Mode

Numerical Keys- Satellite Selection

Menu Navigation - Up/Down

Enter or Accept

Drive Motor – West or East

Polarity Skew Offset +/- 90°

Return to Previous

Go To Operation Screen

Rear Panel

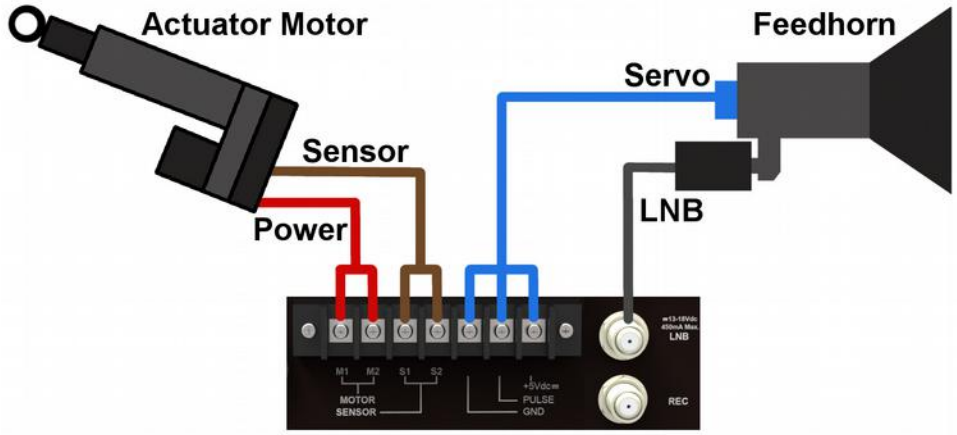
Critical Setting: To prevent damage and voiding the ASC1 warranty, before connecting the power cord to the ASC1 or powering on the input voltage selector switch must be set for the local AC power voltage. For regions with electrical voltage of 90-130Vac, select the 115 position. For regions with voltages between 200-240Vac, select 230.

1. AC Input Voltage Select 115Vac / 230Vac
2. AC Input Power Cord Connection IEC C14 type
3. AC Fuse 250Vac, 2A, 5 x 20mm, (slow-blow type approved)
4. Master Power Switch
5. Motor Connection – M1 /M2 (swap wires if reverse motor movement)
6. Positioner Count Sensor – S1/S2 (must connect to prevent move error)
7. Polarity Servo – Ground (typical color code black)
8. Polarity Servo – Pulse or Skew (typical color code white)
9. Polarity Servo - 5Vdc (typical color code red)
10. Receiver Connection F-type (Automatic Control w/ DiSEqC 1.2)
11. LNB/LNBF Connection F-type (13/18,18/13, 18, 13Vdc or Off)
12. Serial Com RS-232 (Upgrade, Edit, Back-up and Computer Control)

Installation

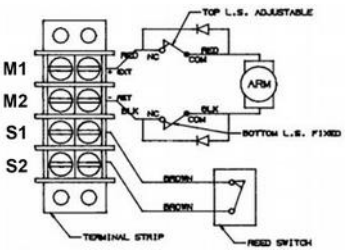
It is recommended that you only use high quality coax cable that is RG6 or better with compression fittings and water proofed connections for all distribution. Motor power wires M1/M2 should be at least 12-14AWG. The sensor and servo wires should be 18-22AWG with a shield to minimize position count, motor setting and polarization control errors. Carefully verify all connections prior to turning on the ASC1 Master Power Switch. Incorrect connections will damage the equipment and void warranties.

This manual assumes that the satellite dish has been prepared for the ASC1 installation with the motor East and West mechanical limiters set and the dish parked in a position that is a few degrees East of the West mechanical limit.



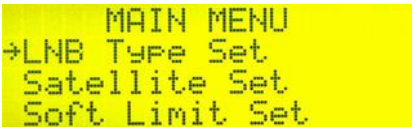
Actuator Motor Connection

1. Verify that the ASC1 Master Power Switch is OFF.
2. Select the Correct AC Line voltage for your install location. Use the 115 setting for AC voltages 90-130Vac and 230 setting for AC voltages 200- 240Vac.
3. Connect the ASC1 S1/S2 terminals to the actuator motor position sensor connections using 18-22AWG wires. It does not matter which wire is connected to either S1 or S2. These sensor wires are typically brown color.



4. Connect the ASC1 M1/M2 terminals to the actuator motor power connections using 12-14AWG wires. These wires are typically red and black color.
5. Verify that the M1/M2/S1/S2 wires are correctly connected to both the ASC1 and the motor. Failure to correctly connect these wires or short will damage equipment and void warranty.
6. Connect the AC cord from the ASC1 to the wall outlet. Do not remove or defeat the ground blade on the IEC AC cord. This ground connection protects you and your equipment!

7. Turn Master Power Switch ON
8. The Main Menu will appear for 20 seconds. If the Main Menu disappears and the Default Operation Display appears, press the Return button to display the Main Menu.

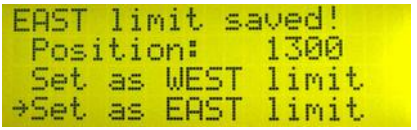


Setting Software East West Limits

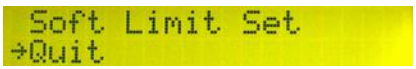
The mechanical limiters inside of the actuator motor should have already been set to prevent extreme dish movements that could damage the reflector or motor. If the mechanical limits have not been set, this should be done before setting the ASC1 software limits. Software limits should only be an additional precaution to prevent hardware damage.

1. Select **Soft Limit Set** and press OK.
2. The Position counter should display 0000. The dish should already be parked near the West Mechanical limit setting. Select Set as WEST Limit and press OK. **EAST Limit Saved!** prompt will be displayed.

3. Select Position and press the East Key to drive the motor to the Eastern limit. If the dish starts moving in the wrong direction, the M1/M2 wires must be swapped. (be sure to turn off the Master Power Switch if this wire swap is required). Carefully watch the dish during the movement to the Eastern limit to be sure that the dish does not contact any object and the motor does not bind or the dish flops.
4. Back the dish up a few clicks from the mechanical hardware limiter stop. Select Set as EAST Limit and press OK. **EAST Limit Saved!** prompt will be displayed.

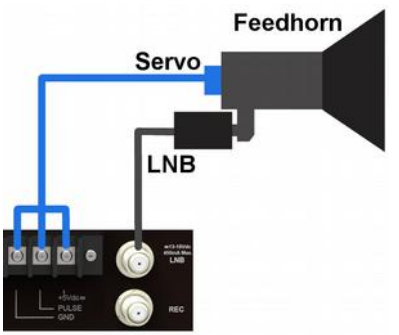


5. Arrow down to Select Quit then Press OK to exit Soft Limit Set Menu and return to the Main Menu.



Polarity Mechanical Servo Connections (optional)

1. Power OFF the ASC1 Master Power Switch.
2. Connect the ASC1 three Servo terminals to the mechanical polarity servo connections using 18-22AWG wire. If the group has a shield, bond to the Ground terminal. Typically, the +5Vdc color code is red color, Pulse (Skew) is white and Ground is black.



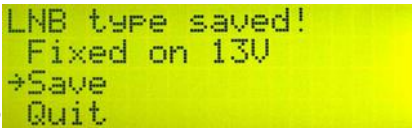
LNB Connection

1. Connect the LNB port to the LNB(s) or LNBF using a quality RG6 coax cable. If your system has multiple LNBs or LNBFs, consult with the supplier of the switches to establish correct connections and path.
2. Power ON the ASC1 Master Power Switch.

LNB Power Setting

1. Select LNB Type Set. Press OK.
   a) Select H:18V, V:13V if a connected STB will control the voltage polarity of a voltage polarity controlled LNBF or using a voltage controlled multi-switch.

   b) Select H:13V, V:18V if you wish to reverse the typical polarity switching protocol as outlined above.
   c) Select Fixed on 18V if powering a single/multiple LNBs or to lock a horizontal polarity on a LNBF.
   d) Select Fixed on 13V if you wish to control a switch lock a vertical polarity on a LNBF.
   e) Select OFF if the ASC1 is not to provide power on the LNB port.
2. Select Save when the desired LNB output voltage has been selected. **LNB Type Saved!** prompt will be displayed.
3. Select Quit. Press OK to exit and return to the main menu.



System Reset

Often a STB will allow the user to reset the controller using the receiver's DiSeqC 1.2 installation menu. If the ASC1 requires a manual System Reset, there are four different types of resets.

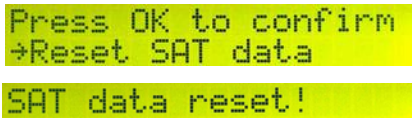
1. Reset the complete Satellite List including the positioning, names & polarity settings.
2. Reset only the Software East and West Limits.
3. Reset only the Positioner Count to 0000.
4. Global Reset All Data To Default.

When any reset function is completed, select Quit and press OK to return to the main menu.

We recommend that you use the PC software and RS-232 serial cable to back-up your custom satellite list and polarity settings before performing a System Reset. This simple save and reload procedure may save you hours of position and polarity reprogramming.

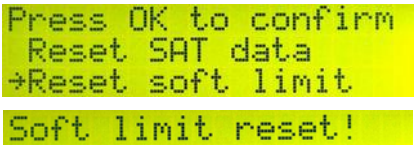
Satellite List Reset

1. Select Reset SAT Data. Press OK.
2. Press OK a second time within 3 seconds to confirm that you wish to delete all satellites and positioning data. SAT Data Reset! Prompt will display.



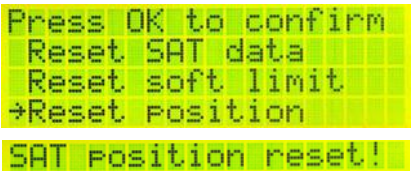
Software East West Limit Reset

1. Select Reset Soft Limit and press OK.
2. Press OK a second time within 3 seconds to confirm that you wish to delete the East and West software limits. Soft Limit Reset! Prompt will display.



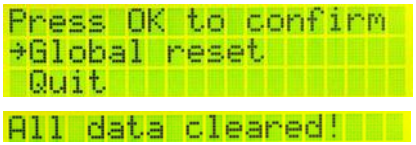
Positioner Count Reset

1. Select Reset Position and press OK
2. Press OK a second time within 3 seconds to confirm that you wish to reset the Positioner Count to 0000. SAT Position Reset! Prompt will display.



Global Reset

1. Select Global Reset and press OK
2. Press OK a second time within 3 seconds to confirm that you wish to reset all data and return to the default settings. Please note that this will delete all satellite positions, satellite names, polarity and skew settings. All Data Cleared! Prompt will display.

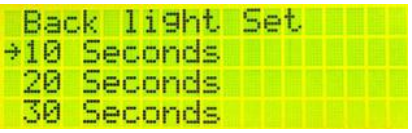


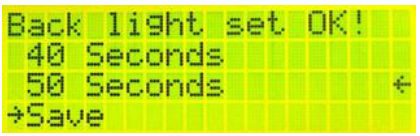
Resynchronize All Satellite Positions

If the motor or actuator position is moved or count is changed, it may be necessary to correct all satellite positions simultaneously. The satellite receiver's DiSEqC 1.2 Installation menu will support this function. ASC1 < Feature Pending >

Back Light Timeout

1. Select Back Light Set. Press OK
2. Select the length of time the backlight will be lighted and press OK. An arrow will appear to the right of the selected time setting.
3. Select Save. Press OK
4. Select Quit and press OK to return to the main menu.



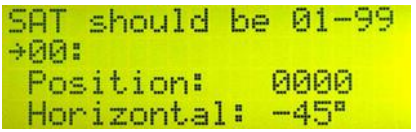


Satellite List and Polarity Programming

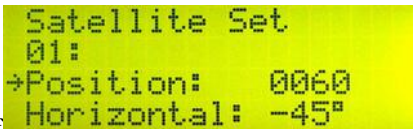
If a DiSEqC 1.2 enable receiver will be used to program and control the ASC1, connect the STB to the REC port and use the receiver's Satellite Installation menu and DiSEqC 1.2 sub menu to program the satellite motor positions then skip to steps 25 - 28. Please note that your receiver may have preassigned DiSEqC 1.2 positions or limit the number of programmable DiSEqC 1.2 motor positions. Contact your receiver reseller for any questions on the operation and programming of these DiSEqC 1.2 settings.

Manual ASC1 Programming

4. Select Satellite Set and press OK.
5. Select DiSEqC 1.2 motor position number (example: 00:) and press OK. A black color block will flash over this two digit number. Use either the numeric remote control keys to enter a two digit number 01-99 (for example:01) or use the front panel Up/Down keys to select the motor position number. Press OK to exit the DiSEqC setting line.



6. Select Position: Use the East/West keys to drive the motor to the first satellite. The motor count increases or decreases as the motor positions the dish. W< or >E symbols indicate West or East direction of travel.

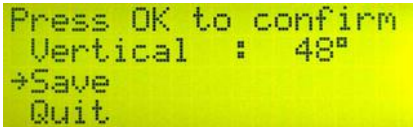


7. Bump the Dish East and West one count at a time to be sure that the signal is optimized on your signal quality meter or attached STB meter.
8. Place an attached signal meter or STB on both horizontal and vertical transponders to be sure that the feedhorn is properly positioned. If using a polarity servo it is suggested to align the feedhorn with the ASC1 default polarity settings of Horizontal: -45 and Vertical +45.

9. Once the feedhorn placement is correct, optimize the Servo Polarity Skew setting for a horizontal transponder by selecting Horizontal: on the ASC1 Satellite Set menu. Press the + or – Polarity Skew keys to rotate the Skew one degree at a time and optimize the signal quality. This Skew fine-tuning will vary between transponders on the same satellite. Skew fine-tuning is a wonderful function that will help optimize signal quality on any transponder and may be the difference between crystal clear reception and no signal with the digital cliff!

10. Chose a Vertical transponder on the satellite meter or STB. Select Vertical: then press the + or – Polarity Skew keys to rotate the Skew and optimize the signal quality.

11. Select Save. Press OK again within 3 seconds to confirm that you wish to save the satellite position and polarity settings.

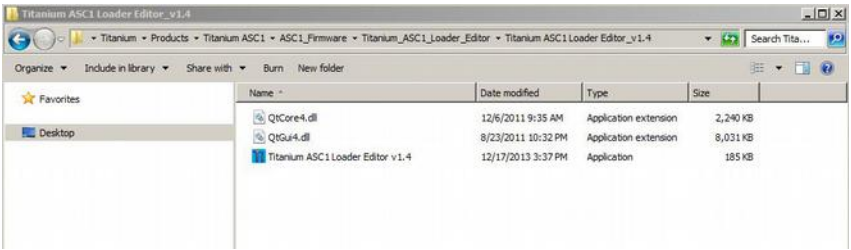


12. To add add additional satellites repeat steps 21 -28.
13. Once you are completed with manually adding satellites, positions and skew offsets, select Quit, press OK and exit back to the Main Menu.

ASC1 PC Loader Editor Software

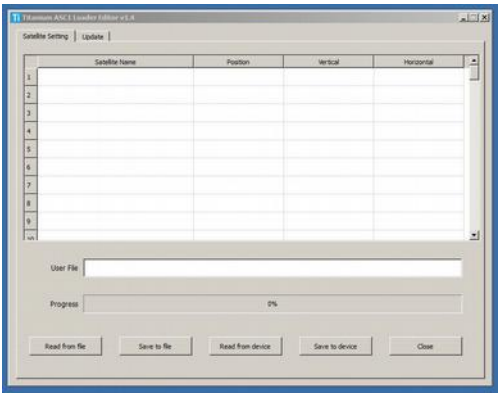
A PC based software loader and editor allows the user to update the ASC1 firmware via RS-232 serial connection to add new functions. The Satellite List may be downloaded to the PC, saved, edited, uploaded to the ASC1 and shared with other ASC1 owners. The software, firmware updates and regional satellite lists are available at www.TitaniumSatellite.com/updates

Open and Close ASC1 Loader / Editor



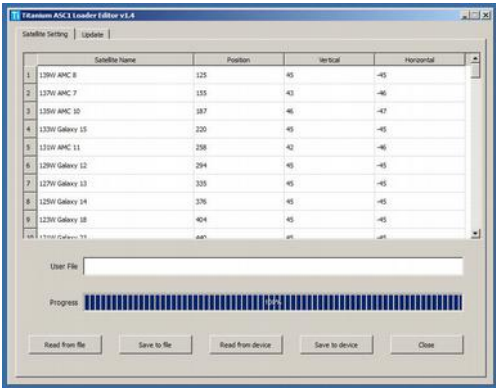
1. Download, unzip and install the ASC1 Loader / Editor on any Win XP/7/8 PC. Be sure to keep the ASC1 Loader/Editor .exe in the same folder as the two .dll files.
2. Connect the included RS-232 cable from the PC to the ASC1.

3. Launch the ASC1 Loader/Editor .exe. Your PC may may warn that the .exe file is not signed and could be potentially dangerous. Accept and the program will launch.
4. Click Close when finished with the ASC1 Loader/Editor



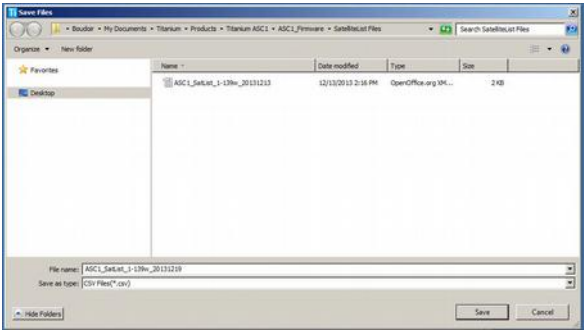
Read Current Satellite List from ASC1

1. Select the Satellite Setting Tab.
2. Make sure that the ASC1 is powered ON.
3. Click Read From Device.
4. When the Satellite list is downloaded from the ASC1 the data will propagate the data cells.



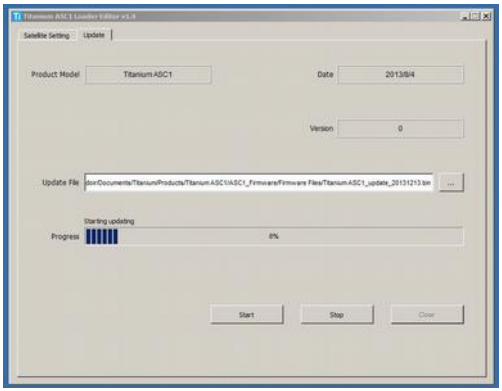
Save a Satellite List

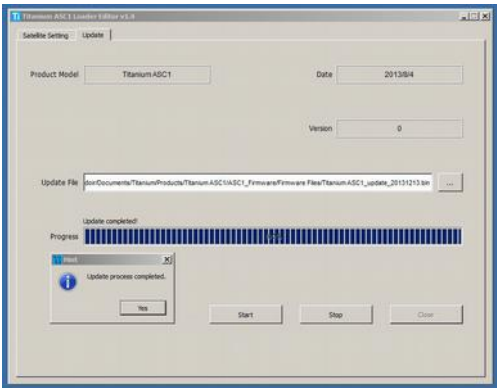
1. Click Save To File.
2. Name the Satellite List .csv file and set the path to save your custom Satellite List.
3. Click Save.



Firmware Upgrade

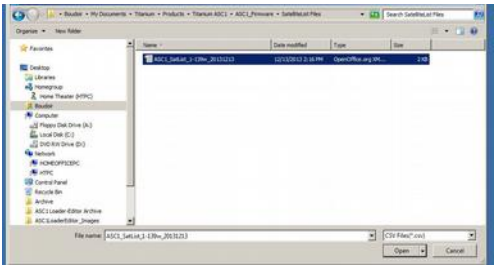
1. Download and unzip the latest ASC1 firmware file.
2. We recommend that the current Satellite list be downloaded, saved before upgrading the firmware. If the firmware overwrites the Satellite List or you perform a Factory Reset, the saved Satellite List may be quickly loaded back to the ASC1 and your custom settings re-installed.
3. Select the Update Tab.
4. Click Start and set the ASC1 firmware file path. The file information will propagate the Product Model, Date and Version information fields.
5. Click Start. A status bar will display the transfer progress. **Caution:** It is not recommended to interrupt the update while in progress. This could corrupt and disable the ASC1. It is best practice to allow an incomplete upgrade attempt to time-out after 2 minutes. Always close the ASC1 Loader/Editor Software and power cycle the ASC1 using the rear master power switch before initiating another upgrade attempt.
6. When the Upgrade is complete 100% a window will indicate "Update Process Completed". Click Yes to exit the Upgrade.
7. It is good practice to power cycle the ASC1 using the master power switch on the rear of the unit.



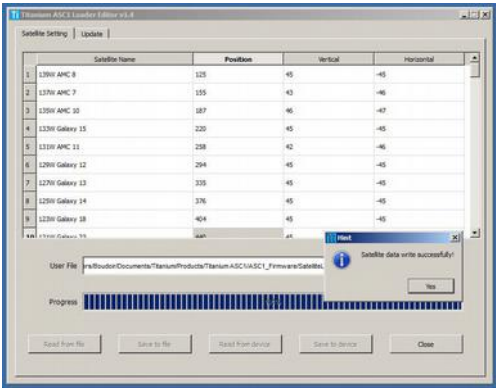


Upload Satellite List to the ASC1

1. Select the Satellite Setting Tab.
2. Click Read From File.
3. Set the file path to the saved Satellite List file. Click Open.
4. The Satellite List data will propagate the data cells.
5. Click Save To Device.

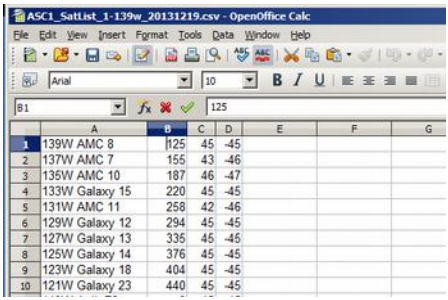


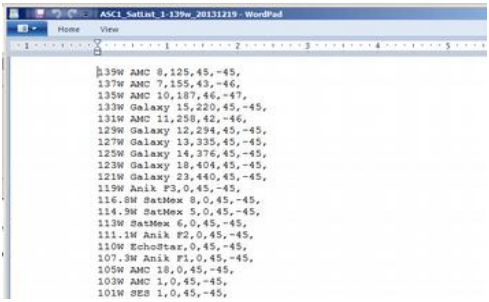
6. When the Satellite List transfer is complete at 100%, a window will indicate “Satellite Write Data Successfully!”. Click Yes to exit the transfer process.
7. It is good practice to power cycle the ASC1 using the master power switch on the rear of the unit.



Edit Satellite List

The Satellite List is a simple 4 column and 99 row .csv type file. The file may be created and edited with the ASC1 Editor, Excel, Notepad or any text editor.





- Each row is a line return and each column is separated by a comma.
- Column 1 is the Satellite Name of up to 14 alpha numeric characters.
- Column 2 is positive or negative 4 digit number indicating the counter position of up to 10,000 counts (-5000 / 0000 / +5000). This count is specific to your system and location.
- Column 3 is positive 2 digit number for vertical polarity degree offset range 0 to 90 with default vertical setting of 45 degrees.
- Column 4 is negative 2 digit number for horizontal polarity degree offset with default horizontal setting of -45 degrees.

Operation

Satellite Receiver Control

The ASC1 may be automatically controlled by a connected Satellite receiver using DiSEqC 1.2 commands. Please refer to the receiver's owners manual on how to program and use a motorized dish using DiSEqC 1.2. All motor positioner installation and operation can be completed using the STB's Installation menu. Polarity offset installation adjustment is not native to most DVBS or S2 satellite receivers and this will be set using either the ASC1 front panel buttons or with the ASC1 remote.

If you are a beginner to using DiSEqC 1.2 motor control, we suggest that you initially program the receiver and ASC1 using the receiver's installation menu. This will assign the same DiSEqC 1.2 motor Position number to both the receiver and the ASC1.

A quick overview of receiver motor control: The STB stores a 2 digit motor position number for each satellite motor position. This reference number is typically called the DiSEqC 1.2 or Motor Position in the satellite receiver's installation menu. This DiSEqC 1.2 number is either preassigned by the firmware or is a user setting. The important thing to remember is that the DiSEqC 1.2 number assigned for each satellite in the STB must match the satellite DiSEqC 1.2 number assigned in the ASC1.

This DiSEqC 1.2 motor position numbering coordination is critical! If the satellite receiver is for example, programmed for DiSEqC 1.2 position number 1 to be satellite G19 @ 97w, but the ASC1 has been programmed for DiSEqC 1.2 number 1 to be satellite NSS1 @ 37.5w, the STB will command the ASC1 to move to position 1 when satellite G-19 is selected. The ASC1 will receive this command to go to position 1, it will move to satellite NSS1. This is not the fault of either the receiver or the ASC1, but simply that the system was incorrectly programmed to communicate the correct information.

Once the Satellite receiver and ASC1 have been programmed, the ASC1 will become an automatic interface between your STB and the satellite dish. Whenever you change channels on your receiver or scan for channels, the ASC1 will automatically move the dish and set the correct polarity. You may use either the receiver's menus to fine-tune the dish position or you may use the ASC1 remote or front panel to fine-tune both dish position and polarity offsets. These fine tuned settings may be saved by either the receiver or the ASC1.

ASC1 Control

The ASC1 may be used as a stand alone dish actuator motor and polarity controller. Once the satellites are programmed following the Manual Programming instructions on page 12, the controller may be operated from the operation screen or the Satellite Setting Screen.

1. To move to a different satellite select the DiSEqC 1.2 position (example: 01: 139W AMC8. Press OK.
2. If using the remote control use the numeric key to enter the two digit motor assignment number. If using the front panel press the +/- (up/down) keys to select the desired satellite.
3. Press OK and the ASC1 will move the dish to the selected satellite and set the skew offset.
4. To fine tune the dish position press East or West on the remote control or front panel.
5. To fine tune the skew offset, select the correct polarity and press the + or – on the remote control or front panel.
6. To save the new settings, select Save and press OK. Press OK again within 3 seconds to confirm that you wish to save the new settings.

NOTE: This is an evolving document. Please check back regularly for new firmware versions and supporting manual updates describing the new features and functions.

Please email your product requests and suggestions to: support@titaniumsatellite.com

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